

## Claims

1. A method comprising:  
storing historical hard disk performance data on a non-volatile memory unit of a system, the data being available on the memory unit after the system has been rebooted.
2. The method of claim 1, wherein the non-volatile memory unit is a cache for the hard disk.
3. The method of claim 2, wherein the non-volatile memory unit includes a form factor of a Mini Peripheral Component Interconnect Express card.
4. The method of claim 1, wherein the non-volatile memory unit includes a Peripheral Component Interconnect Express interface.
5. The method of claim 1, wherein the non-volatile memory unit consists of a thin film electronics memory.
6. The method of claim 1, further including using the historical hard disk performance data to implement a power management policy of the hard disk.
7. The method of claim 1, wherein the historical hard disk performance data consists of data identifying events the produced a spin-down of the hard disk and a period of time thereafter before the hard disk was spun up.

8. A machine readable medium having stored thereon a set of instructions which when executed cause a system to perform a method comprising of:
- storing historical hard disk performance data on a non-volatile memory unit of a system, the data being available on the memory unit after the system has been rebooted.
9. The machine readable medium of claim 8, wherein the non-volatile memory unit is a cache for the hard disk.
10. The machine readable medium of claim 9, wherein the non-volatile memory unit includes a form factor of a Mini Peripheral Component Interconnect Express card.
11. The machine readable medium of claim 8, wherein the non-volatile memory unit includes a Peripheral Component Interconnect Express interface.
12. The machine readable medium of claim 8, wherein the non-volatile memory unit consists of a thin film electronics memory.
13. The machine readable medium of claim 8, wherein the historical hard disk performance data consists of data identifying events the produced a spin-down of the hard disk and a period of time thereafter before the hard disk was spun up.
14. A system comprising of:

a processor;  
a non-volatile cache coupled to the processor; and  
a machine readable medium having stored thereon a set of instructions which when executed cause the system to perform a method comprising of:

storing historical hard disk performance data on the non-volatile cache of a system, the data being available on the non-volatile cache after the system has been rebooted.

15. The system of claim 8, wherein the non-volatile cache is a cache for the hard disk.

16. The system of claim 14, wherein the non-volatile cache includes a form factor of a Mini Peripheral Component Interconnect Express card.

17. The system of claim 8, wherein the non-volatile cache includes a Peripheral Component Interconnect Express interface.

18. The system of claim 8, wherein the non-volatile cache consists of a thin film electronics memory.

19. The system of claim 8, wherein the historical hard disk performance data consists of data identifying events the produced a spin-down of the hard disk and a period of time thereafter before the hard disk was spun up.